

**Notice of Allowability**

Application No.

10/670,957

Examiner

Charanjit S. Aulakh

Applicant(s)

GRIESGRABER, GEORGE W.

Art Unit

1625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-23.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 3
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date May 24, 2004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

Charanjit S. Aulakh  
Primary Examiner  
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### DETAILED ACTION

1. Claims 1-35 are pending in the application.

#### *Election/Restrictions*

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-23, drawn to compounds of formula I, pharmaceutical compositions containing these compounds and a method of inducing cytokine biosynthesis using these compounds, classified in class 546, subclass 82.
- II. Claims 24-27, drawn to A method of treating a viral disease using compounds of formula I, classified in class 514, subclass 293.
- III. Claims 28-31, drawn to A method of treating a neoplastic disease using compounds of formula I, classified in class 514, subclass 303.
- IV. Claims 32 and 33, drawn to compounds of formulae II or III, classified in class 546, subclass 139.
- V. Claims 34 and 35, drawn to compounds of formulae IV or V, classified in class 546, subclass 79.

3. The inventions I, II, III, IV and V as defined above are patentably distinct, each from the other since they are so divergent that a reference showing compounds of invention I would not render compounds of inventions IV and V or methods of inventions II and III prima facie obvious. Search required for e.g ; compounds of invention I in class 546, subclass 82 is not the same search required for e.g ; method of invention II in class 514, subclass 293 and therefore, constitutes a burdensome search.

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4. During a telephone conversation with the applicant's attorney, Mr. Dean A. Ersfeld on May 24, 2004, a provisional election was made with traverse to prosecute the invention of group I, claims 1-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-35 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

#### EXAMINER'S AMENDMENT

4. The following amendment is pursuant to a telephone conversation with the applicant's attorney, Mr. Dean A. Ersfeld on May 24, 2004. The following changes have been made in claims.

Cancel claims 24-35 directed to non-elected subject matter without prejudice to the filing of a divisional application.

In claim 20, line 1, delete ---cytokine--- and furthermore, after biosynthesis, insert ---of interferon or tumor necrosis factor-----.

In claim 22, line 1, delete ---cytokine--- and furthermore, after biosynthesis, insert ---of interferon or tumor necrosis factor-----.

#### REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

Claims 1-23 are allowed since the instant dimer compounds of formula I are neither disclosed nor obvious over the prior art. In the prior art, Crooks ( U.S. Patent no. 6,664,265 ) discloses amido ether substituted imidazoquinolines which are closely

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related to the instant compounds. However, the exemplified compounds ( see examples 1-73 ) of Crooks differ from the instant compounds in having only one substituted imidazoquinoline ring instead of two imidazoquinoline rings and furthermore, there is no teaching, suggestion or motivation in the prior art to modify the compounds of Crooks to prepare the instant dimer compounds.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6: Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charanjit S. Aulakh whose telephone number is (571)272-0678. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571)272-0699. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Charanjit S. Aulakh  
Primary Examiner  
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